

**Remarks**

Claims 1-12 were pending. No claims are cancelled. Claims 13-14 are added.  
Therefore, claims 1-14 are pending.

Support for the amendments and new claims can be found throughout the specification,  
for example:

Claims 1 and 2: page 36, lines 508  
Claim 10 and 11: amended for clarity  
Claim 13: original claim 2  
Claim 14: Example 1 pages 18-19

No new matter is introduced by this amendment, and no amendments were made to  
distinguish prior art.

***Claim objection***

Claim 2 is objected to due to an informality. Claim 2 is amended to recite that the  
polypeptide is encoded by a DNA sequence, as suggested by the Examiner. In view of this  
amendment, Applicants request that the objection to claim 2 be withdrawn.

***35 U.S.C. § 112 first paragraph***

Claims 1, 3, and 10 are rejected under 35 U.S.C. § 112 first paragraph, as failing to  
comply with the enablement requirement. Applicants disagree and request reconsideration.

In order to expedite prosecution, claim 1 is amended to clarify the VSF protein claimed.  
The H and L3 peptides are now described by particular sequence identifiers. In addition, claim  
14 specifies that the VSF protein is produced by hybridoma 4D1B. The Office noted on page 2-  
3 of the action that the specification is enabled for a VSF protein produced by hybridoma 4D1B.  
Thus the claims provide the VSF protein identified by the inventors. In view of these  
amendments, Applicants request that the 35 U.S.C. § 112 first paragraph rejection of claims 1, 3,  
and 10 be withdrawn.

Claim 10 continues to be rejected under 35 U.S.C. § 112 first paragraph, as failing to comply with the enablement requirement. Applicants disagree and request reconsideration.

In order to expedite prosecution, claims 10 and 11 are amended to recite that the pharmaceutical preparation is for treating viral infections; the term “preventing” has been deleted. As noted in the previous response, the specification provides a significant number of examples demonstrating the antiviral activity of virus suppressing factor (VSF) of claim 1. The specification teaches that VSF inhibits viral infection or replication of six different viruses from five virus families: *Picornaviridae* (EMCV and Mengo virus, See Example 10 starting on page 27 of the specification and Example 13 starting on page 30 of the specification), *Orthomyxoviridae* (influenza virus, See Example 11 starting on page 28 of the specification), *Retroviridae* (HIV, See Example 12 starting on page 29 of the specification), *Herpesviridae* (HCMV, See Example 14 on page 32 of the specification) and *Rhabdoviridae* (vesicular stomatitis virus, See Example 23 on page 37 of the specification). In addition, in Applicants’ previous response, Exhibit A provided data showing that VSF has antiviral activity against Coxsackie B4 virus (*Picornaviridae* family).

In summary, the specification provides *in vitro* and *in vivo* data showing the ability of the VSF to treat viral infections and correlates the *in vitro* antiviral activity of VSF with the *in vivo* activity. As Applicants have demonstrated that several individual “species” of the “genus” of viruses can be treated with the claimed VSF protein, Applicants have provided sufficient evidence to enable this genus. Given the breadth of examples provided in the specification, undue experimentation would not be required of one of skill in the art to use the claimed pharmaceutical preparation.

Therefore, the claims are sufficiently enabled and Applicants request that the rejection under 35 U.S.C. § 112, first paragraph be withdrawn.

### ***Rejoinder***

As claim 1 is now in condition for allowance, Applicants request rejoinder of currently withdrawn claims 4-9 and 11-12 as these claims depend from (directly or indirectly) claim 1, and thus include all of the limitations of claim 1.


If there are any minor issues to be resolved before a Notice of Allowance is granted, the Examiner is invited to telephone the undersigned.

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